

REMARKS

Claims 1, 2 and 4-15 are pending in this application. Claim 3 has been canceled. Claims 1, 11, 14 and 15 have been amended. No new matter has been introduced.

Below are Applicant's comments regarding the objection regarding expression (4) on page 23 of the specification and the patentability of pending claims 1, 2 and 4-15 in view of the prior art references cited in the September 23, 2004 Office Action.

Regarding the "informality" in the application regarding the explanation on how Lh, ah, bh, Lo, ao and bo are calculated in expression (4) on page 23 of the specification (September 23, 2004 Office Action at 2), Applicant submits the following remarks:

(i) Lo, ao and bo are calculated by color conversions (RGB-> XYZ-> Lab conversion, and Gammut mapping, which is a well-known technology) with respect to the character object; and

(ii) Lh, ah and bh are calculated based on information of a Lab image and the character object being developed. In this case, the information includes an address, and the number of points.

Applicant also attached the enclosed Exhibit A, which illustrates a block diagram showing how to obtain values Lo, ao and bo, and Lh, ah and bh.

Regarding the patentability of pending claims 1, 2 and 4-15 in view of the prior art references cited in the September 23, 2004 Office Action, Applicant submits the following remarks:

Bollman (U.S. Patent No. 6,778,684) relates to a method for checking image/document quality and discloses the following steps:

- (i) accepting original image data;
- (ii) displaying the original image data for a user;
- (iii) creating a copy of the original image data referred as modification image data or update image data;
- (iv) displaying the update image data for the user;
- (v) searching for at least text data, line data, and color data with respect to the update image data; and
- (vi) displaying a message corresponding to each search result for the user.

In the above searching step (v) of Bollman, a document or an image is evaluated by comparing the text data and the background color data, followed by displaying a message regarding foreground and background colors. By further comparing the text data and a brightness of the background, a message regarding the brightness is displayed. By further comparing the text data and an unpleasantness, it is determined whether or not the document or the image is acceptable. A similar process is conducted for the line data and color data. When the text data arranged on the similar color tone of the background is unreadable, Bollman discloses modifying the color tone of the background and the color tone of the text data. The brightness is similarly processed. Thus, the method of Bollman allows a user to improve or modify the image quality, or enhance features of the image.

Bollman, however, fails to disclose, teach or suggest that the background information shows a "value based on a color as a reference of the uniform color space of a single color" used to form an "image in an area where [the] drawing object is formed," as recited in amended independent claims 1, 11, 14 and 15 (see also, lines 9-18 of page 22 and lines 21-25 of page 28 in the specification).

Bottou et al. (U.S. Patent No. 5,900,953) ("Bottou") relates to extracting a foreground color and a background color when image data is compressed. In contrast, the crux of the present invention is to provide a method and an apparatus for processing an image signal, and a computer-readable recording medium recorded with a program for causing a computer to process an image signal, in which, based on an image type and background information, an image output signal and a color correction are controlled to obtain a compound document in which characters and line drawings on the background color are clearly visible. Accordingly, a person of ordinary skill in the art would not have been motivated to combine Bollman and Bottou, to arrive at the claimed invention.

Wang et al. (U.S. Patent No. 6,636,628) ("Wang") relates to converting one color space into another color space and has nothing in common with the subject matter of the claimed invention. Thus, again, it would not have been obvious to combine Bollman and Wang, to arrive at the claimed invention.

In view of the above remarks, allowance of pending claims 1, 2 and 4-15 is respectfully requested.

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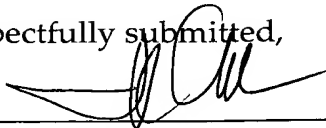
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EXHIBIT A

